

AMENDMENTS

In the Claims:

Please amend the claims as indicated hereafter.

1. (Previously Presented) A system for automatically cropping graphical images, comprising:

memory for storing digital data that defines a graphical image;

an object detector configured to perform a search of said digital data for an object of a particular type and to automatically identify, based on said search, a portion of said digital data that defines an image of an object of said particular type within said graphical image; and

an image cropper configured to automatically crop said digital data based on a position of said object image within said graphical image, said image cropper configured to determine said position of said object image within said graphical image based on said portion automatically identified by said object detector.

2. (Previously Presented) The system of claim 1, wherein said object image is an image of a person's face, and wherein said object detector is configured to search said digital data for facial images.

3. (Original) The system of claim 1, wherein said image cropper is configured to crop said digital data based on a size of said object image.

4. (Original) The system of claim 1, wherein said image cropper is configured to crop said digital data based on said position of said object image such that said object image is substantially centered between two edges of said graphical image.

5. (Previously Presented) A system for automatically cropping graphical images, comprising:

memory for storing digital data that defines a graphical image;

an object detector configured to analyze said digital data and to automatically identify a graphical object within said graphical image; and

an image cropper configured to automatically crop said digital data based on a position of said graphical object within said graphical image such that said graphical object is removed from said graphical image.

6. (Original) The system of claim 1, further comprising:

an input device for receiving an input from a user; and

a system manager configured to enable said image cropper based on said user input.

7. (Original) The system of claim 1, further comprising an image capturing device configured to receive an image of a scene and to produce said digital data based on said image received by said image capturing device.

8. (Original) The system of claim 7, wherein said image capturing device includes a lens for receiving said image of said scene and an image converter for producing said digital data based on said image of said scene.

9. (Previously Presented) A system for automatically cropping graphical images, comprising:

memory for storing digital data that defines a graphical image;

means for performing a search of said digital data for an object of a particular type and for automatically identifying, based on said search, a portion of said digital data that defines an image of an object of said particular type within said graphical image; and

means for automatically cropping said digital data based on a position of said object image within said graphical image, said cropping means configured to determine said position of said object image within said graphical image based on said portion automatically identified by said identifying means.

10. (Previously Presented) The system of claim 9, wherein said object image is an image of a person's face, and wherein said identifying means is configured to search said digital data for facial images.

11. (Original) The system of claim 9, wherein said cropping means is configured to crop said digital data based on a size of said object image.

12. (Original) The system of claim 9, wherein said cropping means crops said digital data based on said position of said object image such that said object image is substantially centered between two edges of said graphical image.

13. (Previously Presented) The system of claim 9, wherein said cropping means crops said digital data based on said position of said object image such that said object image is completely removed from said graphical image.

14. (Original) The system of claim 9, further comprising:
means for receiving an input from a user; and
means for enabling said cropping means based on said user input.

15. (Original) The system of claim 9, further comprising a means for receiving an image of a scene and for producing said digital data based on said image received by said receiving means.

16. (Previously Presented) A method for automatically cropping graphical images, comprising the steps of:
storing digital data that defines a graphical image;
automatically searching said digital data for an object of a particular type;
identifying, based on said searching step, a portion of said digital data that defines an image of an object of said particular type;
determining, based on said identified portion, a position of said object image within said graphical image; and
automatically cropping said digital data based on said position of said object image.

17. (Previously Presented) The method of claim 16, wherein said object image comprises an image of a person's face.

18. (Original) The method of claim 16, wherein said cropping step is further based on a size of said object image.

19. (Original) The method of claim 16, further comprising the step of:
substantially centering said object image between two edges of said graphical image via said cropping step.

20. (Previously Presented) The method of claim 16, further comprising the step of:
removing, via said cropping step, said object image from said graphical image.

21. (Original) The method of claim 16, wherein said searching and cropping steps are automatically performed in response to said storing step.

22. (Original) The method of claim 16, further comprising the steps of:
receiving an input from a user; and
enabling said cropping step based on said user input.

23. (Previously Presented) The system of claim 1, wherein said object detector is configured to make a determination as to whether said portion defines a facial image.

24. (Previously Presented) The system of claim 1, wherein said image cropper is configured to automatically crop said digital data such that said object image is removed from said graphical image.

25. (Previously Presented) The system of claim 24, wherein said object image comprises an image of a face.

26. (Previously Presented) The system of claim 5, wherein said graphical object is an image of a face.

27. (Previously Presented) The method of claim 16, further comprising the step of enabling a user to select the type of automatic cropping to be performed in said cropping step.

28. (Previously Presented) The method of claim 16, further comprising the step of making a determination as to whether said object image is a facial image, wherein said cropping step is based on said determination.

29. (Previously Presented) The method of claim 28, wherein said cropping step comprises the step of removing said object image from said graphical image if said determination indicates that said object image is a facial image.

30. (Previously Presented) A system for automatically cropping graphical images, comprising:

memory for storing digital data that defines a graphical image;

an object detector configured to make a determination as to whether a portion of said digital data defines a facial image; and

an image cropper configured to automatically crop said digital data based on said determination.

31. (Previously Presented) The system of claim 30, wherein said image cropper is configured to automatically crop said digital data, if said portion defines said facial image, based on a position of said facial image within said graphical image.

32. (Previously Presented) The system of claim 30, wherein said image cropper is configured to automatically crop said digital data such that said facial image is removed from said graphical image.

33. (Previously Presented) A method for automatically cropping graphical images, comprising the steps of:

storing digital data that defines a graphical image;

determining whether a portion of said digital data defines a facial image; and

automatically cropping said digital data based on said determining step.

34. (Previously Presented) The method of claim 33, wherein said cropping step is further based on a position of said facial image within said graphical image.

35. (Previously Presented) The method of claim 33, wherein said cropping step comprises the step of removing said facial image from said graphical image.

36. (Previously Presented) A method for cropping a graphical image, comprising the steps of:

detecting a plurality of faces in the graphical image;

determining if one of the faces is close to a center of the graphical image; and

automatically cropping the graphical image.

37. (Previously Presented) The method of claim 36, further comprising the step of determining a location in the graphical image of each of the plurality of faces.

38. (Previously Presented) The method of claim 36, wherein the step of cropping the graphical image comprises positioning one of the plurality of faces closer to the center.

39. (Previously Presented) The method of claim 36, wherein if one face of the plurality of faces is close to the center, then cropping the graphical image to move the one face closer to the center.

40. (Previously Presented) The method of claim 36, wherein if one face of the plurality of faces is close to the center, then cropping the graphical image to remove at least one other face of the plurality of faces.

41. (Previously Presented) A method for cropping a graphical image, comprising the steps of:

detecting a face in a digital image of a picture; and

automatically cropping the digital image based on a size of the face relative to the digital image.

42. (Previously Presented) The method of claim 41, wherein the step of automatically cropping further comprises the step of moving the face closer to a center of the picture.

43. (Previously Presented) The method of claim 41, wherein the step of automatically cropping further comprises the step of moving the face higher in the picture.

44. (New) The method of claim 41, wherein the automatically cropping further comprises the step of moving the face away from a center of the picture.

45. (New) The method of claim 36, wherein said cropping step is based on said determining step.